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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,402	10/09/2001	Noboru Ohtake	450100-03527	5719

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EXAMINER

RIVERO, MINERVA

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,402

Applicant(s)

OHTAKE ET AL.

Examiner

Minerva Rivero

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4-9, 11-15, 17-22, 24-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Tanaka *et al.* (US 6,738,561).

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4. Regarding claims 1, 8, 14 and 21, Tanaka *et al.* disclose a transmission-reception method, transmission apparatus, receiving apparatus and transmission-reception system for transmitting and receiving digital data, which must be transmitted divisionally in a plural number of times and do not admit a miss thereof, on the real time basis, comprising:

a transmission apparatus including division means for dividing the digital data into a predetermined number of data units of equal size, information addition means for adding, to that one of the transmission units obtained by the division of the digital data by said division means which is to be transmitted first, information representing that the transmission data unit is the first transmission data unit and adding, to each of those ones of the transmission data units which are to be successively transmitted following the first transmission data unit, information representing that the transmission data unit is a succeeding transmission data unit, and transmission means for transmitting the transmission data units to which the information is added by said information addition means on the real time basis (*means for dividing an input signal into packs*, Col. 4, Lines 8-15; *each audio pack has 2,048 bytes*, Col. 17, Line 63 – Col. 18, Line 4; *reading out a signal from the DVD-Audio*, Col. 57, Lines 22-28 and Col. 60, Lines 57-64; *receiving the input signal from a transmission line*, Col. 5, Lines 6-9; *generating audio packs and management packs*, Col. 5, Lines 10-18; *transmission of audio display information in detected control packs*, Col. 23, Lines 12-17; *related data position is decided by an audio frame number*, Col. 17, Lines 43-50; *real-time information data*, Col. 4, Lines 8-16); and

a reception apparatus including reception means for receiving the data units transmitted on the real time basis from said transmission apparatus, and restoration means for positioning that one of the data units received be said reception means to which the information representing that the data unit is the first data unit as top data is added and positioning each of the data units received following the first data unit to which the information representing that the data unit is a succeeding data unit is added as succeeding data next to the last one of the data units which have been received till them (*receiving the input signal from a transmission line*, Col. 5, Lines 6-9; *real-time information data*, Col. 4, Lines 8-16; *audio data is read out in an order determined by SCR (system clock reference) information*, Col. 22, Lines 55-60; *audio pack address (SCR information) is incremented by '1' for every new audio pack*, Col. 31, Lines 39-42).

5. Regarding claims 2, 9, 15 and 22, Tanaka *et al.* disclose said transmission apparatus further includes end data formation means for forming end data representative of the end of transmission of the digital data transmitted as the transmission data units and said transmission means transmits the end data from said end data formation means immediately after the last one of the transmission data units of the digital data to be transmitted is transmitted, and said reception apparatus includes discrimination means for discriminating whether or not the data of any of the data units received by said reception means are the end data (*display end time in terms of addresses of audio packs*, Col. 6, Lines 43-47; *address of an audio pack with indication end time*, Col. 20, Lines 60-65; *end*

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comparator, Col. 24, Lines 26-32 and 58-67; completion of reproduction of audio pack and reproduction of next audio pack, Col. 31, Lines 22-27 and 39-42; deciding whether or not the latest audio pack is the final audio pack, Col. 31, Lines 49-56 and 61-67).

6. Regarding claims 4, 17 and 24 Tanaka *et al.* disclose the digital data to be transmitted are divided into predetermined number of data units, and said reception apparatus includes counting means for counting the number of the data unit to which the information representing that the data unit is the first data unit is added and the data units to each of which the information representing that the data unit is a following data unit is applied (*each audio pack has 2,048 bytes, Col. 17, Line 63 – Col. 18, Line 4; time in a first and succeeding audio pack serially numbered, Col. 18, Lines 6-11; reproduced signal processing circuit includes a reading unit which reads out audio data in an order determined by SCR information, Col. 27, Lines 62-66).*

7. Regarding claims 5, 11, 18 and 25, Tanaka *et al.* disclose the digital data are text data (Col. 56, Lines 19-21).

8. Regarding claims 6, 12, 19 and 26, Tanaka *et al.* disclose the main information data in the form of digital data can be transmitted between said transmission apparatus and said reception apparatus on the real time basis, and the digital data are duplication control information or copyright information

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regarding the main information data or ancillary data for allowing said reception apparatus to play back the main information data in accordance with a method or standards determined in advance (*copyright data*, Col. 56, Lines 19-21; *copyright management information*, Col. 54, Lines 1-3).

9. Regarding claims 7, 13, 20 and 27, Tanaka *et al.* disclose the main information data in the form of digital data can be transmitted between said transmission apparatus and said reception apparatus, and the digital data are ancillary data for allowing said reception apparatus to play back multi-channel digital audio data as the main information data in accordance with a number of channels of said reception apparatus and in accordance with a method or standards determined in advance (*bit representing a down mix mode*, Col. 33, Lines 56-63 and Col. 34, Lines 22-30; *down mix coefficients table*, Col. 54, Lines 13-18).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 3, 10, 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka *et al.* (US 6,738,561), in view of Katz *et al.* (US 6,560,651).

Tanaka *et al.* do not explicitly disclose but Katz *et al.* do disclose said transmission apparatus further includes transmission data sum total calculation means for calculating the sum total of the data of the data units divided by said division means and said end data formation means forms the end data which include the sum total calculated by said transmission data sum total calculation means, and said reception apparatus further includes receive data sum total calculation means for calculating the sum total of the received data received by said reception means and including the data of the data unit to which the information representing that the data unit is the first data unit is added and the data of the data units to each of which information representing that the data unit is a succeeding data unit is added, and discrimination means for comparing the sum total of the received data calculated by said receive data sum total calculation means with the sum total of the data of the data units included in the end data to discriminate whether or not all of the digital data transmitted are received normally (*checksums or redundancy checks*, Col. 13, Lines 48-52).

Checksums are commonly used in the art to detect corrupted data.

Therefore it would have been obvious to one ordinarily skilled in the art at the time of the invention to supplement the teachings of Tanaka *et al.* with having said transmission apparatus further include transmission data sum total

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calculation means for calculating the sum total of the data of the data units divided by said division means and said end data formation means forms the end data which include the sum total calculated by said transmission data sum total calculation means, and said reception apparatus further include receive data sum total calculation means for calculating the sum total of the received data received by said reception means and including the data of the data unit to which the information representing that the data unit is the first data unit is added and the data of the data units to each of which information representing that the data unit is a succeeding data unit is added, and discrimination means for comparing the sum total of the received data calculated by said receive data sum total calculation means with the sum total of the data of the data units included in the end data to discriminate whether or not all of the digital data transmitted are received normally, as disclosed by Katz *et al.*, in order to verify the integrity of the data after transmission, as further disclosed by Katz *et al.* (*transport integrity data*, Col. 13, Line 49).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoshio *et al.* (US 2001/0024447) disclose a method and system for transmitting audio and its respective control information.

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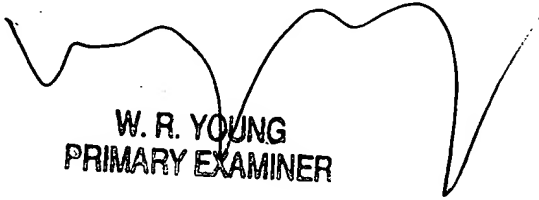
Ando et al. (US 2001/0017975) disclose a method for storing audio and control information indicating the playback sequence.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minerva Rivero whose telephone number is (571) 272-7626. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MR 12/12/05


W. R. YOUNG
PRIMARY EXAMINER